5. Egor

Program Name: Egor.java   **Test Input File: egor.dat**

Egor and his wife Zelda are going to have a baby. Congratulations! The big day is approaching quickly, and the happy couple have made all the necessary preparations. They have purchased a car seat, set up a crib and even painted the nursery. But they have been procrastinating on one very important step in their preparations. They haven't chosen a name yet! Turns out they both have some very odd requirements for the name of their baby.

Egor has never been very fond of his name so he would rather not name the baby Egor. He does, however, like that his name is short and easy to spell so he would like to limit the number of letters in his baby's name to eight, so a name like Bernadette would be out. Furthermore, Egor thinks that the "ph" sound is a nuisance so names like Stephen and Ralph are out.

Zelda, on the other hand, can't stand the letters c, m, o and y. So that's a hard no on Mary and Coy. She thinks very short names are not sophisticated enough so she wants her child to have at least five letters in its name. Her child will not be named Ty. Zelda doesn't like that her name comes at the end of the alphabet so her last requirement for her baby's name is it must begin with a letter from the first half of the alphabet.

All these requirements make it really difficult to choose a name! These guys could use a program to help them sift through possible names and come up with a list of names that meets all requirements. Help them out by writing that program.

Input: The first line of data will be a number N that represents the number of possible names, followed by N more lines each containing one possible name. Each name will always begin with a capital letter and will contain no symbols. There will be no duplicate names.

Output: An alphabetized list of acceptable names, each on a separate line.

Sample input:
```
16
Bipul
Banu
Dawn
Egor
Gowri
John
Kirby
Richard
Joel
Arnav
Carlanthony
Danica
Alok
Inisha
Bernadette
Calvin
```
Sample output:
```
Arnav
Bipul
Inisha
```